

## **Prof. Mustafa ARIK**

### **Personal Information**

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### **International Researcher IDs**

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### **Education Information**

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Kimya/Fizikokimya, Turkey 1999 - 2003

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Turkey 1996 - 1999

### **Foreign Languages**

English, B2 Upper Intermediate

### **Dissertations**

Doctorate, Pyronin B ve Pyronin Y'nin Kolloidal Sistemlerde Fotofiziksel Özelliklerinin İncelenmesi, Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Kimya/Fizikokimya, 2003

Postgraduate, Floresinin Floresans Şiddeti Üzerine Moleküler Oksijenin Etkisi ve Moleküler Etkileşmeler, Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Kimya/Fizikokimya, 1999

### **Research Areas**

Chemistry, Physical Chemistry, Spectroscopy, Natural Sciences

### **Academic Titles / Tasks**

Professor, Ataturk University, Fen Fakültesi, Kimya, 2017 - Continues

Associate Professor, Ataturk University, Fen Fakültesi, Kimya, 2011 - 2017

Assistant Professor, Ataturk University, Fen Fakültesi, Kimya, 2003 - 2011

Research Assistant, Ataturk University, Fen Fakültesi, Kimya, 1996 - 2003

### **Academic and Administrative Experience**

Atatürk Üniversitesi, 2011 - 2016

Atatürk Üniversitesi, 2009 - 2011

Atatürk Üniversitesi, 2008 - 2010

## Courses

Polimer Kimyası, Undergraduate, 2018 - 2019

## Advising Theses

- ARIK M., Grafen, BN, MoS<sub>2</sub>, TiS<sub>3</sub> sentezi, karakterizasyonu ve suda çözünebilir grafen/boyar madde kompozitlerinin fotofiziksel özelliklerinin incelenmesi, Doctorate, G.Güven(Student), 2017
- ARIK M., Pyronin Y bileşığının sıvı ve misel içeren ortamlardaki fotofiziksel özellikleri ve fotodinamiği, Doctorate, B.Meryem(Student), 2011
- ARIK M., Floresin ile merosiyanın 540 molekül çifti arasındaki floresans enerji transferinin model membranlarda incelenmesi, Doctorate, M.Toprak(Student), 2011
- ARIK M., Pyronin B ve Pyronin Y bileşiklerinin polivinil sülfatlı ortamda fotofiziksel özelliklerinin incelenmesi, Postgraduate, M.Türk(Student), 2009
- ARIK M., Metanol Ortamında kumarin 35 ile pyronin bileşikleri arasındaki floresans enerji transferleri, Postgraduate, M.Toprak(Student), 2006
- ARIK M., Floresans Enerji Transferinin misel sistemlerde incelenmesi, Postgraduate, B.Meryem(Student), 2005

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. Molecular aggregates of pyronin dyes with polyelectrolyte polystyrene sulfonate (PSS) in aqueous solution  
Arik M., Kassa S. B., ONGANER Y.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.391, 2020 (SCI-Expanded)
- II. Photophysical and photodynamic properties of Pyronin Y in micellar media at different temperatures  
Beşer B. M., Arik M., Onganer Y.  
LUMINESCENCE, vol.34, pp.415-425, 2019 (SCI-Expanded)
- III. Bis(indolyl)methane substituted tetraphenylethylene derivatives as AIE active materials  
Lafzi F., Kılıç H., Ertugrul B., Arik M., Saracoğlu N.  
JOURNAL OF LUMINESCENCE, vol.208, pp.174-182, 2019 (SCI-Expanded)
- IV. Photophysics and photodynamics of Pyronin Y in n-alcohols  
Beşer B. M., Onganer Y., Arik M.  
LUMINESCENCE, vol.33, no.8, pp.1394-1400, 2018 (SCI-Expanded)
- V. Synthesis and Characterization of Reduced Graphene Oxide/Rhodamine 101 (rGO-Rh101)  
Nanocomposites and Their Heterojunction Performance in rGO-Rh101/p-Si Device Configuration  
BATIR G. G., ARIK M., Caldiran Z., TÜRÜT A., AYDOĞAN Ş.  
JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.1, pp.329-336, 2018 (SCI-Expanded)
- VI. Synthesis of an F-BODIPY [2]catenane using the chemistry of bis(dipyrinato) metal complexes  
NİŞANCI B., Sahinoglu S., Tuner E., ARIK M., Kani I., DAŞTAN A., BOZDEMİR Ö. A.  
CHEMICAL COMMUNICATIONS, vol.53, no.92, pp.12418-12421, 2017 (SCI-Expanded)
- VII. Pyronin B-Graphene Oxide-Based Turn-On Fluorescent Sensors for Fe<sup>3+</sup> in an Aqueous Medium:  
Synthesis and Living Cell Application  
Batir G. G., GEDİKLİ S., ARIK M.  
CHEMISTRYSELECT, vol.2, no.33, pp.10889-10894, 2017 (SCI-Expanded)
- VIII. The thin films of pyronin dyes doped with poly(vinyl sulphate) on glass substrate: Preparation and characterization  
Meral K., ARIK M., ONGANER Y.  
Journal of Molecular Structure, vol.1105, pp.350-356, 2016 (SCI-Expanded)

- IX. **Liquid nitrogen-assisted synthesis of fluorescent carbon dots from Blueberry and their performance in Fe 3+ detection**  
Aslandas A. M., Balci N., Arik M., Sakiroglu H., Onganer Y., Meral K.  
Applied Surface Science, vol.356, pp.747-752, 2015 (SCI-Expanded)
- X. **A novel system for Fe3+ ion detection based on fluorescence resonance energy transfer**  
Bozkurt E., Arik M., Onganer Y.  
Sensors and Actuators, B: Chemical, vol.221, pp.136-147, 2015 (SCI-Expanded)
- XI. **The fluorescence quenching mechanism of coumarin 120 with CdS nanoparticles in aqueous suspension**  
Acar M., BOZKURT E., Meral K., ARIK M., ONGANER Y.  
Journal of Luminescence, vol.157, pp.10-15, 2015 (SCI-Expanded)
- XII. **The investigation of the interaction between orientin and bovine serum albumin by spectroscopic analysis**  
Toprak M., ARIK M.  
LUMINESCENCE, vol.29, no.7, pp.805-809, 2014 (SCI-Expanded)
- XIII. **Graphene oxide sheets as a template for dye assembly: graphene oxide sheets induce H-aggregates of pyronin (Y) dye**  
Sinoforoglu M., Gur B., Arik M., Onganer Y., Meral K.  
RSC ADVANCES, vol.3, pp.11832-11838, 2013 (SCI-Expanded)
- XIV. **Fluorescence quenching of fluorescein by Merocyanine 540 in liposomes**  
Toprak M., Aydin B. M., ARIK M., ONGANER Y.  
JOURNAL OF LUMINESCENCE, vol.131, no.11, pp.2286-2289, 2011 (SCI-Expanded)
- XV. **Evaluation of Colour Changed of Acrylic Resin Materials in the Different Solutions**  
DUYMUS Z. Y., YANIKOĞLU N., ARIK M.  
ASIAN JOURNAL OF CHEMISTRY, vol.22, no.9, pp.6669-6676, 2010 (SCI-Expanded)
- XVI. **An investigation of energy transfer between coumarin 35 and xanthene derivatives in liquid medium**  
TOPRAK M., ARIK M.  
TURKISH JOURNAL OF CHEMISTRY, vol.34, no.2, pp.285-293, 2010 (SCI-Expanded)
- XVII. **Effect of surfactants on the aggregation of pyronin B and pyronin Y in aqueous solution**  
ARIK M., Meral K., ONGANER Y.  
JOURNAL OF LUMINESCENCE, vol.129, no.6, pp.599-604, 2009 (SCI-Expanded)
- XVIII. **The fluorescence resonance energy transfer between dye compounds in micellar media**  
AYDIN B. M., Acar M., ARIK M., ONGANER Y.  
DYES AND PIGMENTS, vol.81, no.2, pp.156-160, 2009 (SCI-Expanded)
- XIX. **Electrochemical Preparation of Pyronin Y Thin Films on Gold Substrates**  
ALANYALIOĞLU M., ARIK M.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.111, no.1, pp.94-100, 2009 (SCI-Expanded)
- XX. **A systematic study on the absorption and fluorescence properties of 2,4,6-triaryl and tripyridylpyridines**  
Findik E., ARIK M., Ceylan M.  
TURKISH JOURNAL OF CHEMISTRY, vol.33, no.5, pp.677-684, 2009 (SCI-Expanded)
- XXI. **Cytotoxicity of 1-Aryl-3-butylamino-1-propanone Hydrochlorides against Jurkat and L6 Cells**  
GÜL M., METE E., ATALAY M., ARIK M., GÜL H. İ.  
ARZNEIMITTELFORSHUNG-DRUG RESEARCH, vol.59, no.7, pp.364-369, 2009 (SCI-Expanded)
- XXII. **Synthesis of cyclopropane-annulated conduritol derivatives: norcaran-2,3,4,5-tetraoles**  
SENGUEL M. E., MENZEK A., ŞAHİN E., ARIK M., SARAÇOĞLU N.  
TETRAHEDRON, vol.64, pp.7289-7294, 2008 (SCI-Expanded)
- XXIII. **Analysis of fluorescence quenching of pyronin B and pyronin Y by molecular oxygen in aqueous solution**  
Celebi N., Arik M., Onganer Y.  
JOURNAL OF LUMINESCENCE, vol.126, no.1, pp.103-108, 2007 (SCI-Expanded)

- XXIV. **Fluorescence quenching of fluorescein with molecular oxygen in solution**  
Arik M., CELEBI N., ONGANER Y.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.170, no.2, pp.105-111, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A Chemical Actinometric Method for the Determination of Corrected Fluorescence Spectra**  
Acemioğlu B., Arik M., ONGANER Y.  
Chimica Acta Turcica, vol.29, pp.1-5, 2001 (Peer-Reviewed Journal)
- II. **A Chemical Actinometric Method for the Determination of Corrected Fluorescence Spectra**  
Acemioğlu B., Arik M., ONGANER Y.  
Chimica Acta Turcica, vol.29, pp.1-5, 2001 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Formation Dynamics of Molecular Aggregates in Aqueous Medium Containing Surfactants**  
ARIK M., ONGANER Y.  
2nd. International Aegean Physical Chemistry Days, Balikesir, Turkey, pp.1
- II. **Formation Dynamics of Molecular Aggregates in Aqueous Medium Containing Surfactants**  
ARIK M., ONGANER Y.  
2nd. International Aegean Physical Chemistry Days, Balikesir, Turkey, pp.1
- III. **Photophysics and Photodynamics of Pyronine Y-Polar Protic Solvent Interaction**  
Beşer B. M., Arik M., ONGANER Y.  
International Conference on Advances in Natural and Applied Sciences, Antalya, Turkey, 18 - 21 April 2017, pp.43
- IV. **Optical and morphological characterizations of pyronin dye poly vinyl alcohol thin films formed on glass substrates**  
MERAL K., ARIK M., ONGANER Y.  
AIP Conference Proceedings, 21 - 23 April 2016
- V. **Optical and Morphological Characterizations of Pyronin Dye-Poly (vinyl alcohol) Thin Films Formed on Glass Substrates**  
Meral K., ARIK M., ONGANER Y.  
International Conference on Advances in Natural and Applied Sciences (ICANAS), Antalya, Turkey, 21 - 23 April 2016, vol.1726
- VI. **A Facile Synthesis of Fluorescent Carbon Dots from Blueberry and Their Performance in Fe<sup>3+</sup> Detection**  
ŞENOL A. M., BALCI N., ARIK M., ŞAKIROĞLU H., ONGANER Y., MERAL K.  
1st international turkic world conference on chemical sciences and technologies, Bosnia And Herzegovina, 27 October - 01 November 2015
- VII. **Kumarin 120 ve Floresin molekülleri arasındaki enerji transferine metal iyonlarının etkisi**  
BOZKURT E., ARIK M., ONGANER Y.  
V. Fiziksel Kimya Günleri, Konya, Turkey, 16 - 19 May 2015
- VIII. **Kumarin 120 ve Floresin Molekülleri Arasındaki Enerji Transferine Metal İyonlarının Etkisi**  
BOZKURT E., ARIK M., ONGANER Y.  
V. Fiziksel Kimya Günleri, Konya, Turkey, 16 - 19 May 2015, pp.21
- IX. **Kumarin 120 ve Floresin Molekülleri Arasındaki Enerji Transferine Metal İyonlarının Etkisi**  
BOZKURT E., ARIK M., ONGANER Y.  
V. Fiziksel Kimya Günleri, Konya, Turkey, 16 - 19 May 2015, pp.21
- X. **H-Aggregates of Pyronin Y in Aqueous Solution Containing Graphene Oxide Sheets**

- SINOFOROGLU M., GUR B., ARIK M., ONGANER Y., MERAL K.  
International Conference on Engineering and Natural Sciences, Üsküp, Macedonia, 15 - 19 May 2015, pp.75
- XI. **Interactions Between Coumarin 151 and Colloidal CdS Semiconductor Particles in Aqueous Solution**  
BOZKURT E., ACAR M., MERAL K., ARIK M., ONGANER Y.  
International Semiconductor Science & Technology Conference, İstanbul, Turkey, 13 - 15 January 2014, pp.93
- XII. **Dye-Surfactant Interaction Studied by Photodynamic Parameters**  
AYDIN B. M., TOPRAK M., ARIK M., ONGANER Y.  
4th EuCheMS Chemistry Congress, Prague, Czech Republic, 26 - 30 August 2012, pp.1112
- XIII. **Merosiyanin 540 Dye Bileşinin Langmuir-Blodgett (LB) Filmleri: Optik ve Morfolojik Karakterizasyonu**  
BOZKURT E., BAYRAKTUTAN T., GÜR B., ACAR M., AYDIN B. M., TOPRAK M., MERAL K., ARIK M., ONGANER Y.  
Uluslararası Katılımlı 25. Ulusal Kimya Kongresi, Erzurum, Turkey, 27 June - 02 July 2011, pp.160
- XIV. **Pyronine Y-Micelle Interactions Depending on Temperature**  
AYDIN B. M., ARIK M., ONGANER Y.  
IX Chemical Physics Congress, İzmir, Turkey, 14 - 16 October 2010, pp.17
- XV. **The Study of Interactions Between Coumarin 120 and Colloidal Cds with Spectroscopic Techniques**  
ACAR M., BOZKURT E., MERAL K., ARIK M., ONGANER Y.  
IX. Chemical Physics Congress, İzmir, Turkey, 14 - 16 October 2010, pp.26
- XVI. **A Spectroscopic Study of Fluorescence Quenching Between Fluorescein and Merocyanine 540 in Model Membrane Systems**  
TOPRAK M., ARIK M., ONGANER Y.  
IX Chemical Physics Congress, İzmir, Turkey, 14 - 16 October 2010, pp.25
- XVII. **The Study of Interactions between Coumarin 120 and Colloidal CdS with Spectroscopic Techniques**  
ACAR M., BOZKURT E., MERAL K., ARIK M., ONGANER Y.  
IX Chemical Physics Congress, İzmir, Turkey, 14 - 16 October 2010, pp.26
- XVIII. **The Effect of CdS Nano Particles on The Fluorescence of Coumarin 151 Molecules in Aqueous Solution**  
BOZKURT E., ACAR M., MERAL K., ARIK M., ONGANER Y.  
5. Ulusal Nanobilim ve Nanoteknoloji Konferansı, Eskişehir, Turkey, 8 - 12 June 2009, pp.54
- XIX. **Photophysical Properties of (6-diethylamino-xanthene-3-ylidene)-diethylammonium and (6-diethylamino-xanthene-3-ylidene)-dimethylammonium in Polyelectrolyte Solution**  
Meral K., ARIK M., ONGANER Y.  
International Conference on Organic Chemistry, Erzurum, Turkey, 5 - 09 July 2007, pp.2
- XX. **Molecular Excitons of Pyronin Dyes in Aqueous Colloidal Medium**  
Meral K., ARIK M., ONGANER Y.  
2nd. International Aegean Physical Chemistry Days, Balıkesir, Turkey, 7 - 10 October 2004, pp.2
- XXI. **Molecular Excitons of Pyronin Dyes in Aqueous Colloidal Medium**  
Meral K., ARIK M., ONGANER Y.  
2nd. International Aegean Physical Chemistry Days, Balıkesir, Turkey, 7 - 10 October 2004, pp.2
- XXII. **Pyronin Bileşiklerinin Heterojen Sulu Ortamda Agregasyonu**  
ARIK M., ONGANER Y.  
First International Aegean Physical Chemistry Days, İzmir, Turkey, 5 - 07 June 2002, pp.1
- XXIII. **Pyronin Bileşiklerinin Heterojen Sulu Ortamda Agregasyonu**  
ARIK M., ONGANER Y.  
First International Aegean Physical Chemistry Days, İzmir, Turkey, 5 - 07 June 2002, pp.1

## Supported Projects

GÜLTEKİN D., ARIK M., ŞEN S., SİNOFOROĞLU M., Project Supported by Higher Education Institutions, Perilen Monoimiddiester Türevlerinin Sentezi ve Agregasyon Özelliklerinin İncelenmesi, 2018 - 2019

ARIK M., BOZDEMİR Ö. A., BAŞAR S. S., ÖZDEMİR Y., Project Supported by Higher Education Institutions, Aza-BODIPY türevi bileşiklerin sentezi ve fotofiziksel özelliklerinin İncelenmesi, 2017 - 2018

## Metrics

Publication: 49

Citation (WoS): 608

Citation (Scopus): 648

H-Index (WoS): 13

H-Index (Scopus): 13

## Congress and Symposium Activities

Photophysics and Photodynamics of Pyronine Y- Polar Protic Solvent Interaction, Attendee, Antalya, Turkey, 2017